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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,705	12/29/2005	Klaus Behringer	32860-000969/US	3728

30596 7590 06/09/2009
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EXAMINER

BAHTA, KIDEST

ART UNIT	PAPER NUMBER
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2123

MAIL DATE	DELIVERY MODE
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06/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/562,705	Applicant(s) BEHRINGER, KLAUS	
	Examiner KIDEST BAHTA	Art Unit 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-11, 13, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-11, 13 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 2/18/09 has been received and fully considered; claims 8-11, 13, 19-20 are presented for examination. Claims 1-7, 12, 14-18 and 21 are canceled.
2. Regarding the drawing objection under 37 CFR 1.83(a) has been withdrawn.
3. Regarding the rejection under 35 USC 101, the Examiner maintains.
4. Regarding the rejection under 35 USC 103, Jerome et al. (US 4,510,602) in view of Thomas et al. (US 5,623,680), Maintained.

Response to Arguments

5. Applicant's arguments filed 2/18/09 have been fully considered, but they are not persuasive.

Regarding claim 8, rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 8 do not comply with 35 U.S.C. 101 because they are not tied to another statutory class (such as a particular apparatus) or transform underlying subject matter (such as an article or materials) to a different state or thing. The body of the claim must positively recite the particular apparatus performing the method steps.

Claims 9-11, 13, 19-20 are rejection under 101 since it depend on claim 8.

Regarding the arguments of improper hindsight. Both Engdahl and Flora-Holmquist are considered by the Examiner to be analogous art and the Examiner has prepared a proper prima facie case when combining the teachings, therefore applicant's argument of improper hindsight is not persuasive. In response to applicant's argument

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that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In addition, applicant argues that Both Engdahl and Flora-Holmquist, fail to disclose “wherein the equipment is switched to a safety state when the input real values deviate from the corresponding setpoint values for more than a predetermined time”.

However, Examiner disagrees since Flora-Holmquist discloses in column 5, lines 18-34, the application of the prior art finite state machine involves the control of a device 20 which consists of a motor and parameters associated with the motor. The motor is enclosed in a cabinet having a door which can be open or closed. The motor is water-cooled and has sensors which sense whether the flow of water is enabled or disabled, and also sensors which sense whether the water level is high or low. A temperature sensor senses if the temperature is within a predetermined operating range, high or low, i.e. above or below the operating range. Command signals of OFF, ON and IDLE are used to control the motor. A timer is associated with the motor to measure elapsed time of operation for maintenance purposes and provides a timeout input indicating a predetermined time has elapsed.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claim 8 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 8 do not comply with 35 U.S.C. 101 because they are not tied to another statutory class (such as a particular apparatus) or transform underlying subject matter (such as an article or materials) to a different state or thing. The body of the claim must positively recite the particular apparatus performing the method steps.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 8-11, 13 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jerome et al. (US 4,510,602) in view of Thomas et al. (US 5,623,680).

Regarding claims 8-9, Jerome discloses receiving a plurality of input real values; (column 4, lines 61-68); output means for respectively outputting a digital output value;

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memory means for storing setpoint values relating to the inputs and outputs (column 5, lines 4-16); and allocation means for allocating a digital output value to one of the digital outputs as a function of a comparison of at least one of the input real values with a corresponding setpoint value, the setpoint values respectively including one of the state values 1, 0 and independence state value (column 4, lines 31-61), applicable to at least one of the setpoint values in the memory means (column 2, lines 50-53; column 6, lines 37-48; column 5, lines 31-47).

Jerome fails to disclose the allocation of a digital output value to one of the digital outputs being capable of being carried out by the allocation means independently of the at least one input real value whose allocated setpoint value includes the independence state value.

Thomas discloses the allocation of a digital output value to one of the digital outputs being capable of being carried out by the allocation means independently of the at least one input real value whose allocated setpoint value includes the independence state value (column 6, lines 24-46; column 3, lines 1-3, column 4, lines 45-50; Fig. 6), and wherein the equipment is switched to a safety state when the input real values deviate from the corresponding setpoint values for more than a predetermined time (column 5, lines 18-34).

It would have been obvious to a person of ordinary skill in the art at the time of invention was made to modify the teachings of Jerome and Thomas since a plurality of peripheral decentralized units are provided for arithmetic operations, comparisons, and

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counting operations without interfering with or delaying the execution of a principal program stored in the memories.

Regarding claims 10, 19-20, Jerome discloses a plurality of sets of setpoint values are respectively provided for an output value or set of output values (column 4, lines 32-61).

Regarding claim 13 Thomas discloses the safety instrument switches to the safety state if the input real values deviate from the corresponding setpoint values for more than a predetermined time; the sets of setpoint values are checked with a check sum at fixed time intervals (column 7, lines 32-35; column 6, lines 24-46).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11 Any inquiry concerning this communication or earlier communications from the examiner should be directed Kideest Bahta whose telephone number is 571-272-3737. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval IPAIRI system. Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAG system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kideest Bahta/

Primary Examiner, Art Unit 2123